

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-3. (Canceled)

4. (Currently Amended) The compound of Claim ~~3~~ 11 wherein R¹ is hydrogen or methyl.

5. (Canceled)

6. (Currently Amended) The compound of Claim ~~4~~ 11 wherein R⁴ is C₁₋₃alkyl and R⁵ is hydrogen or C₁₋₃alkyl.

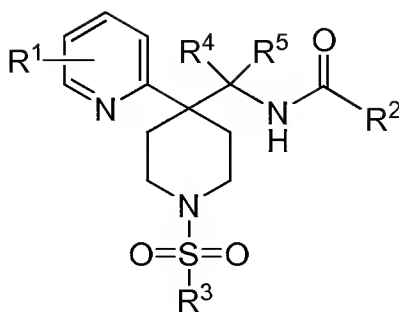
7. (Original) The compound of Claim 6 wherein R⁴ is C₁₋₃alkyl in the (S) configuration and R⁵ is hydrogen.

8. (Original) The compound of Claim 6 wherein R⁴ is methyl and R⁵ is hydrogen.

9. (Withdrawn-Currently Amended) The compound of Claim ~~4~~ 11 wherein R⁴ is methyl and R⁵ is methyl.

10. (Currently Amended) The compound of Claim ~~4~~ 11 wherein R⁴ is hydrogen and R⁵ is hydrogen.

11. (Currently Amended) A ~~The compound of Claim 4 of the formula Ic:~~



Ic

or a pharmaceutically acceptable salt thereof, wherein:

R¹ is selected from the group consisting of:

- (1) hydrogen,
- (2) C₁₋₃alkyl,
- (3) fluoro,
- (4) -CF₃,
- (5) -morpholinyl, and
- (6) -O-C₁₋₃alkyl;

R² is phenyl, which is substituted with R^{2a}, R^{2b} and R^{2c},

R^{2a}, R^{2b} and R^{2c} are independently selected from the group consisting of:

- (1) hydrogen,
- (2) halogen,
- (3) -C₁₋₆alkyl,
- (4) -CF₃,
- (5) -OCF₃,
- (6) -OCHF₂,
- (7) -SCF₃,
- (8) -SCHF₂, and
- (9) -NH₂;

R³ is C₁₋₆alkyl, which is unsubstituted or substituted with 1-6 halogen, hydroxyl,

-NR¹⁰R¹¹, or heterocycle, which is substituted with R^{2a}, R^{2b} and R^{2c};

R⁴ and R⁵ are independently selected from the group consisting of:

- (1) hydrogen, and
- (2) C₁₋₆alkyl, which is unsubstituted or substituted with halogen or hydroxyl,
or R⁴ and R⁵ taken together form a C₃₋₆cycloalkyl ring; and

R¹⁰ and R¹¹ are independently selected from: (a) hydrogen, (b)-C₁₋₆alkyl, which is unsubstituted or substituted with hydroxy, 1-6 fluoro or -NR¹²R¹³, where R¹² and R¹³ are independently selected from hydrogen and -C₁₋₆alkyl, and where R¹⁰ and R¹¹ may be joined to form an azetidiny ring, (c) -C₃₋₆cycloalkyl, which is unsubstituted or substituted with hydroxy, 1-6 fluoro or -NR¹²R¹³, (d) benzyl and (e) phenyl.

12 and 13. (Canceled)

14. (Currently Amended) The compound of Claim ~~13~~ 11 wherein ~~R² is phenyl and~~
R^{2a}, R^{2b} and R^{2c} are independently selected from the group consisting of:

- (1) hydrogen,
- (2) fluoro,
- (3) chloro,
- (4) bromo,
- (5) -CF₃, and
- (6) -NH₂.

15 to 17. (canceled)

18. (Currently Amended) The compound of Claim ~~4~~ 11 wherein R³ is selected from C₁₋₆alkyl and C₁₋₆alkyl-fluoro[[],].

19. (Original) The compound of Claim 18 wherein R³ is -CH₂CH₃.

20. (Withdrawn) The compound of Claim 18 wherein R³ is -(CH₂)₂CH₃.

21. (Canceled)

22. (Currently Amended) A compound which is selected from the group consisting of:

2-chloro-3,6-difluoro-N- {[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide;
2,4-dichloro-N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2,4-dichloro-N- {(1S)-1-[1-(ethylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}ethyl} benzamide;
2-chloro-3,6-difluoro-N- {1-methyl-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}ethyl} benzamide;
2-chloro-N- {[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide;
2,6-dichloro-N- {[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} -benzamide;
2-bromo-N- {[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide;
2,4-dichloro-N- {[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide;
2-chloro-6-fluoro-N- {[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide;
2-amino-6-chloro-N- {[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide;
2-fluoro-6-methoxy-N- {[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide;
2-chloro-N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2-fluoro-N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} -6-(trifluoromethyl)benzamide;
2,6-difluoro-N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2-chloro-6-fluoro-N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2,6-dichloro-N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2-chloro-3,6-difluoro-N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2-chloro-4-fluoro-N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
4-chloro-2-fluoro-N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2,4-dichloro-N- {[4-(4-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide

2,4-dichloro-N- {[1-(methylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide;
2,4-dichloro-N- {[1-(isopropylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide
2,4-dichloro-N- {[1-(ethylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} benzamide;
~~2,4-dichloro-N- {[1-(propylsulfonyl)-4-pyridin-3-yl]piperidin-4-yl}methyl} benzamide;~~
~~2,6-dichloro-N- {[1-(propylsulfonyl)-4-pyridin-3-yl]piperidin-4-yl}methyl} benzamide~~
~~2,4-dichloro-N- {[1-(propylsulfonyl)-4-pyridin-4-yl]piperidin-4-yl}methyl} benzamide;~~
~~2-chloro-6-fluoro-N- {[1-(propylsulfonyl)-4-pyridin-4-yl]piperidin-4-yl}methyl} benzamide;~~
2-chloro-6-fluoro-N- {[4-(6-morpholin-4-ylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2,4-dichloro-N- {[4-(6-morpholin-4-ylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2,4,5-trifluoro-N- {[4-(6-methoxypyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
2,4-dichloro-5-fluoro-N- {[4-(6-methoxypyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} benzamide;
~~N- {[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl} cyclohexanecarboxamide;~~
N- {[1-(ethylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}methyl} -2,4-difluorobenzamide;
2,4-dichloro-N- {1-methyl-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}ethyl} benzamide;
2-chloro-3,6-difluoro-N- {1-methyl-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}ethyl} benzamide;
N- {1-methyl-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}ethyl} -2-(trifluoromethoxy)benzamide;
2,4-dichloro-N- {1-methyl-1-[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]ethyl} benzamide;
2-chloro-3,6-difluoro-N- {1-methyl-1-[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]ethyl} benzamide;
2,4-dichloro-N- {(1S)-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}ethyl} benzamide;
2-chloro-3,6-difluoro-N- {(1S)-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl}ethyl} benzamide;
2,4-dichloro-N- {(1S)-1-[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]ethyl} benzamide;
2-chloro-3,6-difluoro-N- {(1S)-1-[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]ethyl} benzamide;

~~N-((1S)-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl)ethyl}thiophene-3-carboxamide;~~
~~N-((1S)-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl)ethyl}cyclopentane-carboxamide;~~
~~N-((1S)-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl)ethyl}cyclohexane-carboxamide;~~
~~2,5-dichloro-N-((1S)-1-[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]ethyl}thiophene-3-carboxamide;~~
~~4-bromo-N-((1S)-1-[4-(6-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]ethyl}thiophene-3-carboxamide;~~
~~2,5-dichloro-N-((1S)-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl)ethyl}thiophene-3-carboxamide;~~
~~4-bromo-N-((1S)-1-[1-(propylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl)ethyl}thiophene-3-carboxamide;~~
~~2-chloro-N-[[1-(propylsulfonyl)-4-pyrimidin-4-yl]piperidin-4-yl]methyl}benzamide;~~
~~2,4-dichloro-N-[[1-(propylsulfonyl)-4-pyrimidin-4-yl]piperidin-4-yl]methyl}benzamide;~~
~~2-chloro-3,6-difluoro-N-[[1-(propylsulfonyl)-4-pyrimidin-4-yl]piperidin-4-yl]methyl}benzamide;~~
~~2,4-dichloro-5-fluoro-N-[[1-(propylsulfonyl)-4-pyrimidin-4-yl]piperidin-4-yl]methyl}benzamide;~~
~~2-chloro-N-((1S)-1-[1-(ethylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl)ethyl}benzamide;~~
~~2-chloro-N-((1S)-1-[1-(ethylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl)ethyl}-3,6-difluorobenzamide;~~
~~2-chloro-N-((1S)-1-[1-(ethylsulfonyl)-4-(6-methylpyridin-2-yl)piperidin-4-yl]ethyl}-3,6-difluorobenzamide;~~
~~2,4-dichloro-N-((1S)-1-[1-(ethylsulfonyl)-4-(6-methylpyridin-2-yl)piperidin-4-yl]ethyl}benzamide;~~
~~2,4-dichloro-N-[[1-methyl-1-[1-(azetidinesulfonyl)-4-pyridin-2-yl]piperidin-4-yl]ethyl}benzamide;~~
~~2,4-dichloro-N-[[4-(3-methylpyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl}benzamide;~~
~~2,4-dichloro-N-((1-(propylsulfonyl)-4-[6-(trifluoromethyl)pyridin-2-yl]piperidin-4-yl)methyl}benzamide;~~
~~2,4-dichloro-N-((1-(propylsulfonyl)-4-[4-(trifluoromethyl)pyridin-2-yl]piperidin-4-yl)methyl}benzamide;~~
~~2,4-dichloro-N-[[4-(3-chloropyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl}benzamide;~~
~~2,4-dichloro-N-[[4-(3-methoxypyridin-2-yl)-1-(propylsulfonyl)piperidin-4-yl]methyl}benzamide;~~
~~2-chloro-N-[[4-(3-chloropyridin-2-yl)-1-(ethylsulfonyl)piperidin-4-yl]methyl}-3,6-difluorobenzamide;~~
~~2,4-dichloro-N-[[1-(ethylsulfonyl)-4-pyridin-2-yl]piperidin-4-yl]methyl}benzamide;~~
~~2,4-dichloro-N-[[1-(propylsulfonyl)-4-pyrazin-2-yl]piperidin-4-yl]methyl}benzamide;~~

2,4-dichloro-N-(1-{1-[(3-fluoropropyl)sulfonyl]-4-pyridin-2-yl}piperidin-4-yl)ethyl)benzamide;
2,4-dichloro-N-({1-[(3-fluoropropyl)sulfonyl]-4-pyridin-2-yl}piperidin-4-yl)methyl)benzamide;
2,4-dichloro-N-{{1-[(3-fluoropropyl)sulfonyl]-4-(3-fluoropyridin-2-yl)}piperidin-4-yl)methyl}benzamide;
2,4-dichloro-N-{{4-(3-fluoropyridin-2-yl)-1-(propylsulfonyl)}piperidin-4-yl)methyl}benzamide;
2,4-dichloro-N-{{1-[4-(3-fluoropyridin-2-yl)-1-(propylsulfonyl)}piperidin-4-yl]ethyl}benzamide;
2,4-dichloro-N-{{4-(6-trifluoromethylpyridin-2-yl)-1-(propylsulfonyl)}piperidin-4-yl)methyl}benzamide;
4-bromo-2-chloro-N-{{1-(ethylsulfonyl)-4-(3-fluoropyridin-2-yl)-piperidin-4-yl)methyl}benzamide;
2,4-dichloro-N-{{1-[1-(ethylsulfonyl)-4-(3-fluoropyridin-2-yl)-piperidin-4-yl]ethyl}benzamide;
2-bromo-4-fluoro-N-{{1-(ethylsulfonyl)-4-(3-fluoropyridin-2-yl)-piperidin-4-yl)methyl}benzamide;
2-chloro-3,6-difluoro-N-{{1-(ethylsulfonyl)-4-(3-fluoropyridin-2-yl)-piperidin-4-yl)methyl}benzamide;
2,4-dichloro-N-{{1-(ethylsulfonyl)-4-(3-trifluoromethylpyridin-2-yl)-piperidin-4-yl)methyl}benzamide;
2,4-dichloro-N-({1-[(3-fluoropropyl)sulfonyl]-4-(3-trifluoromethylpyridin-2-yl)}piperidin-4-yl)methyl)benzamide;
2,4,6-trifluoro-N-{{1-(ethylsulfonyl)-4-(3-trifluoromethylpyridin-2-yl)-piperidin-4-yl)methyl}benzamide;
2,4-dichloro-N-{{1-(ethylsulfonyl)-4-(3-trifluoromethylpyridin-2-yl)-piperidin-4-yl)methyl}benzamide;
2,4-dichloro-N-{{1-[4-(3-methylpyridin-2-yl)-1-(propylsulfonyl)}piperidin-4-yl]ethyl}benzamide;
N-{{4-(3-bromopyridin-2-yl)-1-(propylsulfonyl)}piperidin-4-yl)methyl}-2,4-dichlorobenzamide;
2,4-dichloro-N-{{4-(6-fluoropyridin-2-yl)-1-(propylsulfonyl)}piperidin-4-yl)methyl}benzamide;
2,4-dichloro-N-{{4-(6-chloropyridin-2-yl)-1-(propylsulfonyl)}piperidin-4-yl)methyl}benzamide;
~~2,4-dichloro-N-{{4-(6-oxo-1,6-dihydropyridin-2-yl)-1-(propylsulfonyl)}piperidin-4-yl)methyl}benzamide;~~
2,4-dichloro-N-{{4-(3-hydroxypyridin-2-yl)-1-(propylsulfonyl)}piperidin-4-yl)methyl}benzamide;
~~2,4-dichloro-N-{{(2[R,S],4[S,R])-2-methyl-1-(propylsulfonyl)-4-pyridin-2-yl}piperidin-4-yl)methyl}benzamide;~~

2,4-dichloro-N-({1-(ethylsulfonyl)-4-[3-(trifluoromethyl)pyridin-2-yl]piperidin-4-yl}methyl)benzamide;

or a pharmaceutically acceptable salt thereof.

23. (Currently Amended) A pharmaceutical composition which comprises a pharmaceutically acceptable carrier and a compound of Claim ~~4~~ 11 or a pharmaceutically acceptable salt thereof.

24 and 25. (Canceled)

26. (Withdrawn - Currently Amended) A method for treating a neurological and psychiatric disorders associated with glycinergic or glutamatergic neurotransmission dysfunction in a mammalian patient in need thereof which comprises administering to the patient a therapeutically effective amount of a compound of Claim ~~4~~ 11 or a pharmaceutically acceptable salt thereof.

27. (Withdrawn - Currently Amended) A method for treating schizophrenia in a mammalian patient in need thereof which comprises administering to the patient a therapeutically effective amount of a compound of Claim ~~4~~ 11 or a pharmaceutically acceptable salt thereof.